

# 9.0 Data Center Facilities Requirements

**Instructions to Vendors:** Vendor shall address in its proposal the solution it proposes to address the Commonwealth's requirements for Data Center Facilities as specified in Section 4 of the Comprehensive Infrastructure Agreement and shall comply with all of the requirements set forth in Schedule 4 thereto.

Unless specifically noted in the appropriate tables below, Vendor agrees to perform, for the environment (described in Schedule 4), the services and associated roles and responsibilities (as outlined within Schedule 4) is not considered to be all-inclusive. Vendor will be responsible for the complete life-cycle management of these services, unless otherwise noted. Vendor shall clearly indicate in the tables below if it does not accept the requirements defined in Schedule 4. Commonwealth considers the Vendor to agree to all Schedule 4 unless identified herein. Vendor should add rows to the tables below as necessary. Absence of issues will constitute agreement for those items not herein addressed, and will be off the table for further negotiation.

[Note to Vendor: the Commonwealth wishes to explore with Vendor various financing/ownership/leasing options potentially available with respect to the data centers.]

Refer to section 11.3.13 Details of the Data Center Facilities Proposed Solution for additional details on Data Center Facilities Services.

## 9.1 Data Center Facilities Services

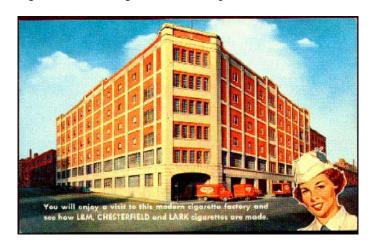
Vendor shall reference and provide detailed accepted and/or proposed service environment components as attachments to the proposal where required and as indicated in Schedule 4.

### The Commonwealth's Current Facilities

As critical and ubiquitous a role Information Technology plays in our lives today, it is but a fraction of the role IT will play five or ten years from now. Reliability and security are fundamental elements to enabling IT's role, and they are directly proportional--critical and ubiquitous cannot be sustained or amplified without increased reliability and security. The Commonwealth of Virginia is an information service provider: for its citizens, its businesses and for other governmental organizations. To provide for and

enable these services in the future, Virginia must achieve sustained, progressive reliability and security for its IT infrastructure.

Constructed in the 1930's as a cigarette factory, the primary data center at Richmond Plaza was never intended to be a data center. It has inadequate security, limited power backup and insufficient mechanical and environmental redundancy. These limitations have challenged the Commonwealth's current and future ability to centralize services and denied Virginia cost savings through economies of scale.



# A new Commonwealth Data Center

Providing for Virginia's future, we propose to design, build and operate a fully managed modern Commonwealth Data Center that meets or exceeds all security and reliability specifications requested in the SOW schedule 4. We further propose to design, build and manage an adjacent modern office facility to house VITA and Commonwealth Partners personnel. **Redacted** 



Security, reliability

Meets or exceeds Tier 3

Offices Adjacent

Area economic impact

Positions Virginia for the future

The new Commonwealth Data Center will provide a physically secure facility for IT operations, and will be located in a business area with no localized security vulnerabilities. Our team has performed an evaluation of the proposed Commonwealth Data Center site and determined that it is not in a flood plain, nor in proximity to railways or hazardous material storage. **Redacted**. The greater Richmond area is in a low risk zone for seismic activity and mild tremors have occurred in the past. Additional information on risk analysis is available in section 11.3.13.

Figure 9.1-1 - Proposed new offices and new Commonwealth Data Center

# Sustained Security and Reliability

The facility will be designed in totality to meet or exceed Tier 3 reliability standards and will feature an automatic fail over system between the primary and secondary mechanical, fire protection, and electrical systems. This fail over system will ensure sufficient capacity and distribution to the facility without disruption of service while performing maintenance, system upgrades or in the event the primary system is interrupted for any other reason.

The non-computer room areas of the facility will be conditioned through utilization of rooftop air-handling units with electronic DDC controls for energy management. The core Data Center will be divided into three mechanical zones with cooling and heating provided by self-contained floor-mounted Computer Room units. These units will contain chilled and heating water coils and steam humidifiers for humidity control.

Life Safety systems for fire protection will be provided throughout the new facility. All non-computer areas will be equipped with a standard wet pipe fire suppression system to meet all local codes and NFPA 13 requirements. The Data / Server Room will receive a dual interlocked, dual alarmed pre-action sprinkler and heat detection system. In the best interest of protecting the computers and other electronic equipment, a FM-200 or other gaseous suppression system would engage in the event of fire suppression system activation. The pre-action wet pipe sprinkler and heat detection system would serve only as a "back-up" system in the Data / Server Room, Battery, and UPS Rooms. The Fire Alarm system will be fully addressable with initiating devices such as ionization detectors, heat detectors, duct detectors, and manual pull stations. Audio/visual devices will also be provided to include bells and strobes.

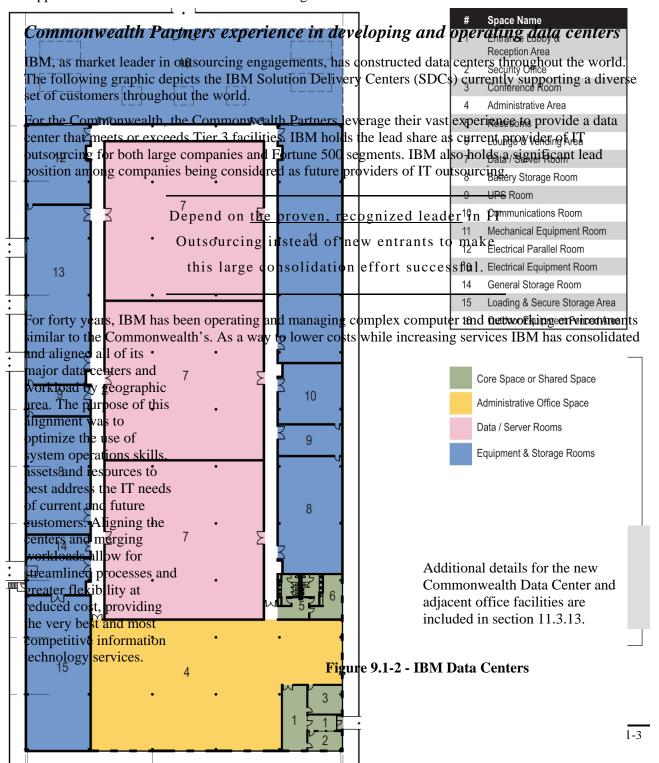
Adequately sized utility power feeds will be brought into the facility from two separate routes; however, only one feed will be active at any given time. A fully redundant UPS system will provide backup power to the computer room, mechanical systems, security, life safety systems, communications and other critical building functions. Four generators are anticipated, two to each bus with a tie-breaker allowing the two to feed one or both busses. Redundant wet cell 20-year batteries will support UPS operation and provide power for the entire data and telecommunications system to remain fully operational for 15



minutes to enable generator sequence, start operation, synchronize with the building system and allow trouble-shooting if necessary.

For security, an electronics system will provide monitoring of all interior and exterior areas by way of a CCTV system. The system will be motion activated and digitally recorded. All cameras will be strategically located throughout the facility and feature a pan/tilt/zoom capability for increased coverage. Exterior and interior areas shall be access-controlled by way of biometric controls.

The entire facility will feature a fully integrated Supervisory Control and Data Acquisition (SCADA) system. The building management system (BMS) will be PLC based with redundant processor, power supplies and I/O modules for remote monitoring.





IBM has established an infrastructure to deliver quality support for both mainframe and midrange environments. To support our customers worldwide, we operate 223 data centers with 73,000 servers and manage thousands of Terabytes of storage. We will provide cost savings to the Commonwealth with increased IT capabilities by leveraging our IT resources and industry knowledge

Commonwealth agencies currently have data centers or dedicated computer server rooms at locations throughout the Commonwealth running more than 3300 servers. These distributed facilities lack standardized backup, recovery, or security mechanisms. Agency servers may be dedicated to specific tasks and have very low utilization, or be overloaded with mail, applications, web hosting, and file processes. The monitoring and support of these servers are further complicated by multiple vendors, protocols, and operating systems. To achieve VITA's goals, the Commonwealth needs a fresh approach to IT infrastructure that is flexible and can adapt to your changing business needs.

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Check if Vendor agrees with Schedule 4, except for the elements listed in the table below.

**Table 53. Data Center Facilities Requirements Issues** 

		Data Center Facilities Requirements Issues				
	ITEM#	REFERENCE #	ISSUE	VENDOR PROPOSED SOLUTION/RATIONALE		
Ī	1.		Intentionally Left Blank			
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## 9.1.1 RPB Data Center Relocation Requirement



Check if Vendor agrees with all elements of Schedule 4 – Section 1.2, except for the elements listed in the table below.

**Table 54. Data Center Facilities Requirements Issues** 

Redacted

# 9.1.2 Physical Site

Check if Vendor agrees with all elements of Schedule 4 – Section 1.2, including all subsections, except for the elements listed in the table below.

**Table 55. Physical Site Requirements Issues** 

Redacted

### **Conformance with Commonwealth Procedures for PPEA**

A. A topographical map (1:2,000 or other appropriate scale) depicting the location of the proposed project;

Please refer to Figure 2.

B. Conceptual site plan indicating proposed location and configuration of the project on the proposed site

Please refer to Figure 2 and the schematics in Section 11.3.13.

C. Conceptual (single line) plans and elevations depicting the general scope, appearance and configuration of the proposed project

WAIVED.



D. Detailed description of the proposed participation, use and financial involvement of the State, agency and/or locality in the project. Include the proposed terms and conditions for the project if they differ from the standard state General

For the proposed new data center and office facilities, the Commonwealth's participation will be to:

- Review and approve data center and office facilities specifications
- Review and approve the site locations and general site plans
- Obtain required financing and/or lease term authorization
- Receive progress reports on construction activities
- Participate in change management against baseline design specifications
- Participate in transition planning to the new facility
- Pay for the facilities according to agreed terms and conditions

Local authorities will be involved in customary site permitting and site inspection during the planning and construction phases.

For the office facilities, we propose to provide the Commonwealth with 158 office spaces, with a reserve allocation of an additional 42 office spaces for growth as requested in the SOW. Office space allocation will include the assignment of one senior executive office, eleven director sized offices, and five manager sized offices. The Commonwealth will have exclusive rights to one medium and one small conference room in proximity to the Commonwealth's work areas. Other conference rooms, auditorium, executive conference room, and break rooms are shared.

We propose to provide the Commonwealth with parking that is in proximity to the facility, to accommodate 158 Commonwealth workers, with a reserve allocation of an additional 42 non-Commonwealth spaces. Access to parking and the office building will be available 24 hours a day for authorized personnel.

For the data center, the Commonwealth will have use of the raised floor to support computing infrastructure equipment, supported by HVAC, UPS, power distribution control systems, fire control systems, and physical security systems, as specified in our response to schedule 4 of the SOW. Any equipment to be placed on the raised floor of the data center, or any other controlled environment, must be coordinated with Commonwealth Partners to enable proper change management. The Commonwealth will be allowed to conduct pre-arranged tours of the data center for authorized personnel.

E. A list of public utility facilities, if any, that will be crossed by the qualifying project and a statement of the plans of the proposer to accommodate such crossings.

No unusual public utility crossings are required for this project. Electrical, water, gas, and telephone/fiber are adjacent to the sites.

F. A statement and strategy setting out the plans for securing all necessary property. The statement must include the names and addresses, if known, of the current owners of the subject property as well as a list of any property the proposer intends to request the public entity to condemn.

All land that is necessary for development of the Commonwealth Data Center and Administration Building are owned by Liberty Property Trust, a Commonwealth Partners team member.

G. A detailed listing of all firms that will provide specific design, construction and completion guarantees and warranties, and a brief description of such guarantees and warranties

Liberty Property Trust will serve as Developer and overall Project Manager for completion of the Data Center and Administration Building. Hayes, Seay, Mattern, and Mattern will serve as Project Architect. The General Contractor will be Manhattan Construction. All performance guarantees and warranties will be provided by the General Contractor.

H. A total life-cycle cost specifying methodology and assumptions of the project or projects and the proposed project start date. Include anticipated commitment of all parties; equity, debt, and other financing mechanisms; and a schedule of project



revenues and project costs. The life-cycle cost analysis should include, but not be limited to, a detailed analysis of the projected return, rate of return, or both, expected useful life of facility and estimated annual operating expenses.

This is addressed in Section 10.2 -Pricing Format Spreadsheet.

I. A detailed discussion of assumptions about user fees or rates, and usage of the projects

This is addressed in Section 10.2 -Pricing Format Spreadsheet.

J. Identification of any known government support or opposition, or general public support or opposition for the project. Government or public support should be demonstrated through resolution of official bodies, minutes of meetings, letters, or other official communications.

## **Public Support or Opposition**

To the credit of government leaders and managers in thousands of jurisdictions, they have found creative ways to use the resources of the private sector to help meet the surging demands of their constituents. By establishing public-private partnerships, government authorities have achieved goals that would otherwise go unmet because of budget limitations.

However, the trend to public-private partnerships is not without its share of controversy and criticism. One argument holds that private enterprise, motivated by the need to generate profits for shareholders, has objectives that are contrary to government's goal in protecting the public's well-being. Individuals and organizations that are hostile to public-private partnerships say that, to generate profits, companies will seek to achieve cost savings at the expense of quality public service.

There are arguments as well that the involvement of private companies in public services will result in the loss of jobs in the public sector, increasing unemployment and creating a counterproductive relationship with public employee unions.

Yet, there are numerous public policy experts whyeso argue that public-private partnerships are beneficial not only in a fiscal sense, but also in terms of improving quality of service and the quality of jobs. Said one expert:

"Counties, states, provinces and communities have hit the 'tax wall,' meaning they have no more room to raise taxes. Doing so would either violate some constitutional or statutory limit, or send people and businesses packing for friendlier climes. In other cases, government simply has not kept pace with technology and productivity advances and must rely upon private enterprise to put its unique expertise to work. State and local governments have routinely experienced cost savings from 10 to 40 percent through privatization, and often with accompanying improvements in the way an asset is managed or a service is delivered." -- From: "For the Good of the People: Using Public-private Partnerships to Meet America's Essential Needs," a white paper from the National Council for Public-private Partnerships.

In arguing the merits of public-private partnerships, one point is abundantly clear. It is not necessary to argue these points on theoretical grounds. With thousands of public-private partnerships in place throughout the country, providing a myriad of services to citizenry, there is an ample body of hard evidence available to evaluate the value and effectiveness of these partnerships and to assess the wisdom of governments in establishing them.

## **Support and Partnership for the Initiative**



This Initiative will provide clear benefits for the Commonwealth's citizens, employees, and state agencies—benefits that are evident through more services and higher reliability—while at the same time reducing costs to the state. Moving forward with the initiative will require change, and with change will come both support and friction.

# Relocation of the Primary Data Center Redacted

We anticipate resistance to the relocation of the primary data center from downtown Richmond to **Redacted** and arguments of contribution to unneeded additional cost, complexity, loss of stature, disruption in service, and disruption in the work lives of those affected by the move.

Valid individually and in part, these concerns need to be viewed relative to the risk mitigation and benefits that the initiative provides Virginia.

#### The data center exists to serve the Commonwealth.

The Richmond Plaza facility was never intended by its designers to be a data center. There are a number of risks that are faced by the data center because of its current location. The data center is difficult to secure because of its proximity to public streets, its open access to parking outside the computer room wall, and the fact that it shares the building with other tenants. The data center is close to the James River and there is no onsite generator, exposing the state and its citizens to a loss of critical services in the event of an extended blackout.

The cost in relocation and disruption in work life must also be viewed in net benefit to the Commonwealth. Overall, the state will have a more cost effective solution, a more reliable solution, and advance its technology leadership among states. A potential loss of data center services would have a wide impact and could cost the state, its citizens, and businesses many times more than the cost of the move itself.

### Job Realignment

Job realignment is expected to be one of the areas generating the strongest opposition. This is understandably so because changes in work roles and work location are significant events for individuals and their families.

As stated, the Commonwealth Partners are committed to the success of Commonwealth employees. All in-scope employees will be extended job offers to work with the Commonwealth Partners. As the phases of our Managed Service engagement roll out, the single most critical element to our success and that of the Commonwealth is the retention of employees who manage the services as they exist today.

The Commonwealth Partners have a comprehensive employment transition approach to accommodate the Commonwealth's needs. The transition approach is risk, needs, and facts based, and driven by individuals with HR and benefits experience.

### **Government Support or Opposition of Initiative**

Given the many benefits that the Infrastructure PPEA brings to Virginia, we believe, overall, that there will be strong support for the program. The Infrastructure PPEA is a win-win scenario for all stakeholders because interests are aligned and capabilities are matched, enhancing the standard of living for citizens and increasing the wealth of the Commonwealth.

Evidence of official Government support for this initiative is shown through the existence of a PPEA process to encourage investment and innovation into public works and through private companies. Evidence is demonstrated through the Commonwealth's interest and participation in the PPEA evaluation process, and through official communications of the potential benefits the PPEA brings to the Commonwealth:

Washington Technology, Virginia sets outsourcing table, March 23, 2005:



The project has strong support from Gov. Mark Warner (D) as well as from key supporters in the state legislature, Stewart said. Even agencies, which can sometimes resist giving wholehearted endorsement to external initiatives, recognize that outsourcing to the private sector may be the only way to modernize legacy systems, he said. "It's a monumental effort, but it really needs to be done," Stewart said. "We're dealing with a lot of antiquated systems, and we really don't have the dollars to modernize our [IT] environment. It will take a significant partnership to make that happen over the long term."

PPEA Frequently Asked Questions, VITA website, What is Virginia trying to accomplish in technology with the PPEA?

"Virginia wants to use PPEA in its approach to facilitate Transformation of IT in Virginia and help Virginia become the best-managed state for technology management and provision of services to citizens. Virginia is trying to improve dramatically its services to citizens and to provide them anytime, anywhere to support Virginia citizens and the operations of customer agencies at a reasonable cost."

## **Public Support or Opposition of the Initiative**

There has been a mixed level of public support and opposition to the initiative. As stated in the Richmond-Times Dispatch, *Titans vie for key state contract, March 30 5, 200:* 

The technical pressures for improvements at VITA are not as great as the agency says, according to one employee. "We have pretty much state-of-the-art stuff," the worker said. "We're getting a new IBM mainframe" computer. "We're curious how they put this together so it doesn't end up costing the taxpayer a bundle," the worker said in an interview, noting that other state government attempts at large-scale outsourcing "have been pretty much big, big mistakes, and costly.

There is also a public Web blog, vita-ppea.blogspot.com which provides for anonymous posts. Though mixed, the majority of the posts discuss concern, questions, and doubt on the merits of the initiative:

"I have only been with the state 3-4 years and I to came here for many of the same reasons as others, and that was to start a retirement plan and have what I thought was job security. When I first heard of VITA I told my wife this is exactly what I thought was going to happen. VITA-Pessimist, March 24, 2005



Commonwealth Partners is fully aware that change is difficult and that there is both support and potential opposition to the initiative. We also understand that careful consideration of the underlying reasons for opposition, and an awareness of lessons learned are necessary to guide an effective evaluation, governance and change management program and realize the benefits envisioned in the initiative.

We are fully committed to working with the stakeholders in managing the concerns and achieving the benefits for all of Virginia, which are envisioned by the Commonwealth's leadership and achievable through our proposal.

The Commonwealth Partners will appoint a senior team to meet proactively with the Cabinet secretaries, state legislators, and agency heads to discuss the approach and benefits. The team will also meet regularly with VITA leadership to discuss impacts and listen to concerns. Direction and consensus from these interactions will support and provide content for our communications and workplans.

K. Demonstration of consistency with appropriate local comprehensive or infrastructure development plans or indication of the steps required for acceptance into such plans.

The sites that are selected for the new Commonwealth Data Center and Administration Building are already zoned for such use within an existing commercial industrial park. All infrastructure needs are predeveloped within the park. The Commonwealth Partners believe that the project is fully consistent with the appropriate local comprehensive or infrastructure development plans.

L. Explanation of how the proposed project would impact local development plans of each affected local jurisdiction

Commonwealth Partners believes that the new Commonwealth Data Center and Administration Building will have a positive impact on local development plans:

- Environmentally friendly. A high-tech data center and office facility creates little demand on the environment. This project brings economic development without the cost of environmental impact or changes to the environment that would adversely affect tourism or quality of life for the residents and sensitive wildlife in the region.
- Stable, quality jobs. The new data center and office facilities will house up to 600 employees. The jobs will be for a managerial, professional, and high-tech workforce, serving Virginia's needs. Other jobs, including security personnel and other service workers, will also be created. Some of the workers may choose to relocate closer to their work locations, stimulating demand for local housing.
- M. Description of an ongoing performance evaluation system or database to track key performance criteria, including but not limited to, schedule, cash management, quality, worker safety, change orders, and legal compliance.

#### WAIVED.

N. Identification of any known conflicts of interest or other disabilities that may impact the public entity's consideration of the proposal, including the identification of any persons known to the proposer who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to The Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

## None.

O. Acknowledge conformance with Sections 2.2 – 4367 thru 2.2-4377 of the Code of Virginia, the Ethics in Public Contracting Act;

IBM is in full compliance with Article 6. Ethics in Public Contracting, Section 2.2-4367 thru 2.2-4377 of the Code of Virginia.



# 9.2 Network Services Connectivity

# 9.2.1 Network Back-End Connectivity

Check if Vendor agrees with all elements of So

Table 56. Network Back-End Connectivity Requirements Issues

	Network Back-End Connectivity Requirements Issues					
ITEM#	REFERENCE #	ISSUE	VENDOR PROPOSED SOLUTION/RATIONALE			
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Check if Vendor agrees with all elements of Schedule 4 – Section 2.1, except for the elements listed in the table below.

# 9.2.2 Engineering/Development

Check if Vendor agrees with all elements of Schedule 4 – Section 2.1, except for the elements listed in the table below.

Table 57. Network Back-End Connectivity Requirements Issues

	Network Back-End Connectivity Requirements Issues					
ITEM #	REFERENCE #	ISSUE	VENDOR PROPOSED SOLUTION/RATIONALE			
1.		Intentionally Left Blank				
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### 9.2.3 Asset Acquisition and Network Provisioning

The Commonwealth Partners will document the requirements for all Data Center connectivity. Networks include WANs, MANs, LANs, and associated equipment such as routers, switches, firewalls, and load balancers. The requirements will be reviewed with VITA for their approval.

A network design will be prepared and documented for review and approval by VITA. Following the design phase, hardware and software that are required to support the Commonwealth Data Center will be procured, installed, deployed, and maintained. The Commonwealth Partners will also coordinate with public carriers such as Verizon. Network monitoring and management will be supported from the Network Operations Center (NOC). In addition, reports on service levels and capacity / performance will be prepared. The NOC will reside within the Data Center facility.

The Commonwealth Partners will install all of the required equipment to support Mainframe, Server, and WAN / LAN telecom services. This includes Front End Processors and devices (CIP and DLSw) to support SNA traffic requirements until such time as OSA technology can handle all traffic directly, FastE LAN switching in support of the service and operation support environments (co-located within the Datacenter), and GigE connectivity for SAN applications and any MAN / WAN connectivity that supports inbound and outbound data traffic. The equipment will be standardized with Cisco products, and other vendor offerings as required.

The network topology diagrams for the Commonwealth Data Center are provided in the following figures:



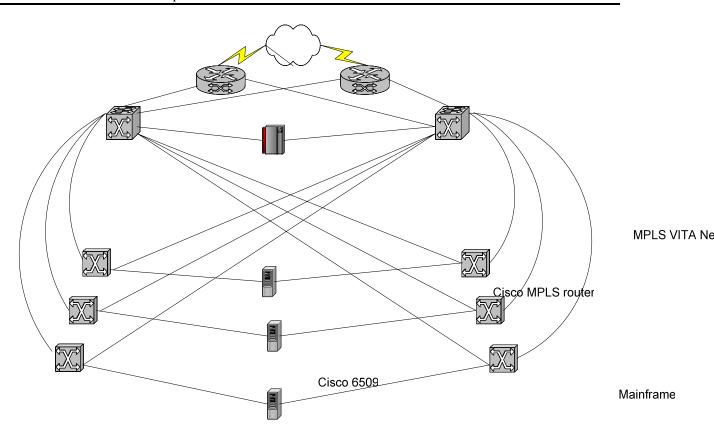


Figure 9.2.2-1 - Proposed LAN Infrastructure Architecture

Server

Cisco 4506

Server

Cisco 4506

Server

Cisco 4506

June 20, 2005 Section Number 9.2-2 Server



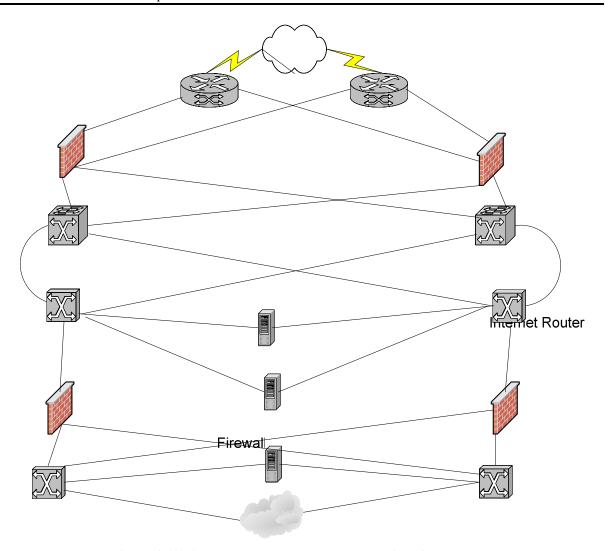


Figure 9.2.2-2 - Proposed Internet Topology Architecture

Cisco CSS Switch

Cisco Switch

Internet Server

Se

Internet

Internet Serve



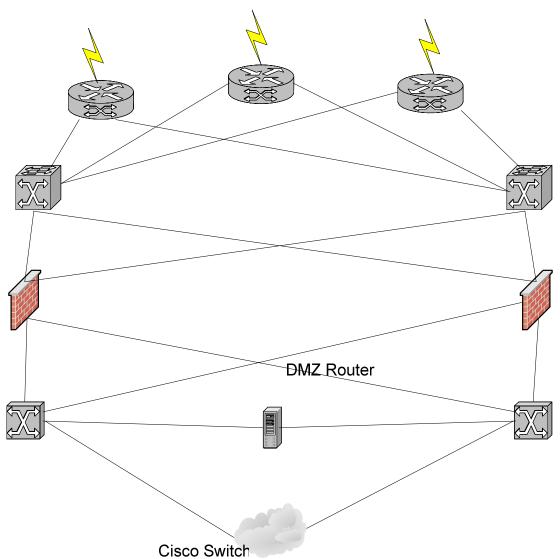


Figure 9.2.2-3 - Proposed DMZ Architecture

Firewall

June 20, 2005 Section Number 9.2-4

DMZ Route



# 9.3 VITA Office Space Requirements

A three story modern office building within walking distance of the Data Center will provide the administrative area for VITA and Commonwealth Partners staff. The office facilities will promote an effective work environment through supplying conference rooms, an auditorium, workout fitness facilities, and two interior break areas. The building will be located in an corporate park setting, and oriented to take advantage of the natural environment, and feature:

- Office space to accommodate up to 550 personnel. This includes up to 200 VITA staff that
  monitor services and provide relationship management, procurement, finance, billing, planning,
  and other VITA internal functions. The remaining personnel are for in-scope VITA personnel and
  Commonwealth Partners.
- Services, that include the following:
  - 183 square feet of office space per person, which includes office space, conference rooms, circulation space, hallways, and break-rooms., and core spaces
  - Auditorium and Executive Conference Room, equipped with advanced audio/visual capabilities
  - Security services
  - Parking for 550 individuals, including handicap accessible space and the 200 Commonwealth spaces
  - Cleaning services, building and grounds maintenance
  - Satellite or cable TV services and associated equipment

The facilities programs that are identified in the SOW will be managed by the Commonwealth Partners. These programs include the following:

- Interior furnishings, based on VITA policies and standards
- Parking spaces allocation at the VITA central office building, data center, and call center
- Employee IMACs for telephones and desktops
- Surplus property (state program)
- PA systems
- Recycling (state program)
- Key and lock administration
- Employee safety
- Emergency reaction plans and procedures (fire, building emergencies, First Aid)

### 9.3.1 Facilities Office Environment

Check if Vendor agrees with all elements of Schedule 4 – Section 3.1, except for the elements listed in the table below.

**Table 58. Facilities Office Environment Issues** 

Redacted



# 9.3.2 Facilities Management

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Check if Vendor agrees with all elements of Schedule 4 – Section 3.2, except for the elements listed in the table below.

**Table 59. Facilities Management Issues** 

Redacted



# 9.4 Backup Data Center Requirements

A backup site is provided to support production in the event of a declared disaster. Our plan is to take advantage of the existing Commonwealth SunGard licenses for Disaster Recovery until their expiration. Currently, selected agencies transfer backup tapes to SunGard in Pennsylvania.

IBM's Business Continuity & Recovery
Services (BCRS) provide existing, hardened
facilities for restoration of Commonwealth
operations.

Once the SunGard licenses expire, a hardened, existing IBM Business Continuity Recovery Services (BCRS) site is proposed. Backup tapes will be sent to Iron Mountain, and will be used for recovery at the BCRS location in Sterling Forest, New York. The default recovery time is 72 hours, but a rate card is provided for more aggressive recovery times. The capability to support electronic vaulting will also be provided. Utilization of a BCRS location affords the following advantages:

Existing hardened site that meets industry-acceptable standards available for immediate use.

Meets or exceeds the 100 mile distance requirement. For regional-wide catastrophes, locating the DR center outside of the Commonwealth can provide enhanced recovery. It is realized that a Backup Data Center has been requested to be located in a rural and economically depressed area of the Commonwealth. The Commonwealth Partners appreciate the motivation for location within a depressed area. However, new construction or retrofitting a facility to host the complement of production hardware will not be cost effective for the Commonwealth. Use of an out of state Disaster Recovery facility is consistent with the current SunGard approach.

Existing, proven options with skilled staff to support electronic vaulting. Options for synchronous or asynchronous vaulting are provided. The asynchronous option is envisioned as the more cost effective option for the Commonwealth. Electronic online vaulting will not require any physical tape or other hard media exchange between the primary data center and backup center.

BCRS has provided recovery for 450 clients that have declared disasters.

Since 1989, IBM BCRS has successfully supported over 450 of our clients who declared a disaster due to a disruption caused by many different events such as hurricanes, floods, hackers, and terrorism. During Hurricane George, for example, IBM Business Continuity and Recovery Services successfully supported 46 clients with 96 different system configurations, across multiple platforms and vendor environments.

During another regional disaster, the New York City World Trade Center terrorist attack on 9/11, IBM Business Continuity and Recovery Services successfully supported 100% of our contractual obligations to our clients who declared a disaster due to this event. In addition, the IBM Corporation utilized the IBM Business Continuity and Recovery Services Emergency Operation Center (EOC) management process to coordinate and manage the support of over 250 customer requests for assistance covering space (data center and end-user space/workplace), hardware, software, networking, personnel, and other services. Support for these customers was provided by resources within the IBM Corporation and its partner



relationships, but they did not utilize any of the dedicated resources (equipment and facilities) of the IBM Business Continuity and Recovery Services business unit.

A Business Impact Assessment is proposed to clarify the level of disaster recovery service required by different agency applications. Refer to *Section 6.1 Cross Functional Services* for information on service levels.



# 9.5 Help Desk Facility

# Redacted

C. Conceptual (single line) plans and elevations depicting the general scope, appearance and configuration of the proposed project

# Waived.

D. Detailed description of the proposed participation, use and financial involvement of the State, agency and/or locality in the project. Include the proposed terms and conditions for the project if they differ from the standard state General Conditions



#### Redacted

E. A list of public utility facilities, if any, that will be crossed by the qualifying project and a statement of the plans of the proposer to accommodate such crossings

#### None.

F. A statement and strategy setting out the plans for securing all necessary property. The statement must include the names and addresses, if known, of the current owners of the subject property as well as a list of any property the proposer intends to request the public entity to condemn.

#### Redacted

G. A detailed listing of all firms that will provide specific design, construction and completion guarantees and warranties, and a brief description of such guarantees and warranties

This is addressed in Section 2.4 – Use of Sub-contractors.

H. A total life-cycle cost specifying methodology and assumptions of the project or projects and the proposed project start date. Include anticipated commitment of all parties; equity, debt, and other financing mechanisms; and a schedule of project revenues and project costs. The life-cycle cost analysis should include, but not be limited to, a detailed analysis of the projected return, rate of return, or both, expected useful life of facility and estimated annual operating expenses.

This is addressed in Section 10.2 -Pricing Format Spreadsheet.

A detailed discussion of assumptions about user fees or rates, and usage of the projects

This is addressed in Section 10.2 -Pricing Format Spreadsheet.

J. Identification of any known government support or opposition, or general public support or opposition for the project. Government or public support should be demonstrated through resolution of official bodies, minutes of meetings, letters, or other official communications.

#### None.

K. Demonstration of consistency with appropriate local comprehensive or infrastructure development plans or indication of the steps required for acceptance into such plans.

This falls in line with the current plans.

L. Explanation of how the proposed project would impact local development plans of each affected local jurisdiction

There are no other technical support or call center-type facilities in **Redacted** 

M. Description of an ongoing performance evaluation system or database to track key performance criteria, including but not limited to, schedule, cash management, quality, worker safety, change orders, and legal compliance.

#### Waived.

N. Identification of any known conflicts of interest or other disabilities that may impact the public entity's consideration of the proposal, including the identification of any persons known to the proposer who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to The Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

IBM is not aware of any known conflicts of interest or other disabilities that may impact the public entity's consideration of this proposal, including the identification of any persons known to the proposer who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to the Virginia State and Local Government Conflict of Interest Act, Chapter 31 (Section 2.2-3100 et seq.) of Title 2.2.

O. Acknowledge conformance with Sections 2.2 – 4367 thru 2.2-4377 of the Code of Virginia, the Ethics in Public Contracting Act;

IBM is in full compliance with Article 6. Ethics in Public Contracting, Sections 2.2-4367 thru 2.2-4377 of the Code of Virginia.